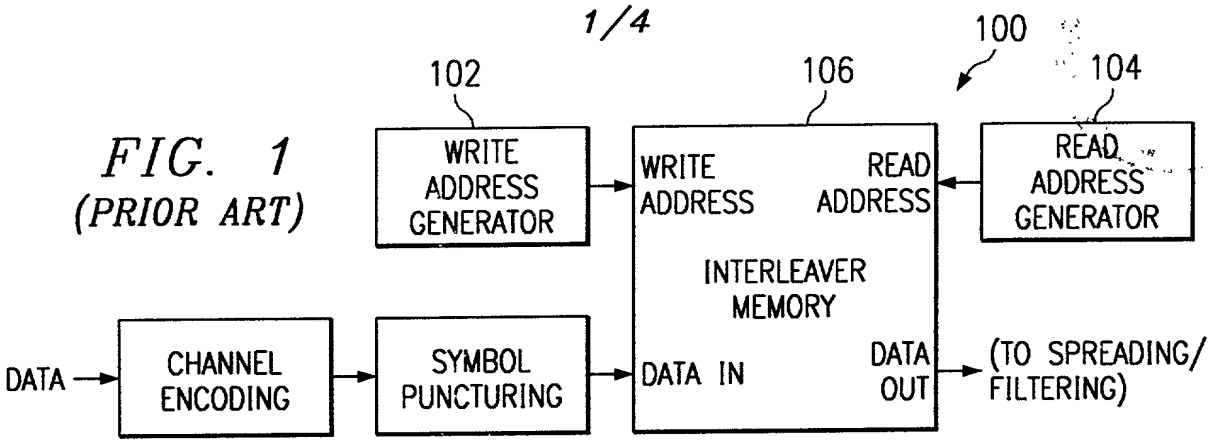

FIG. 1
(PRIOR ART)

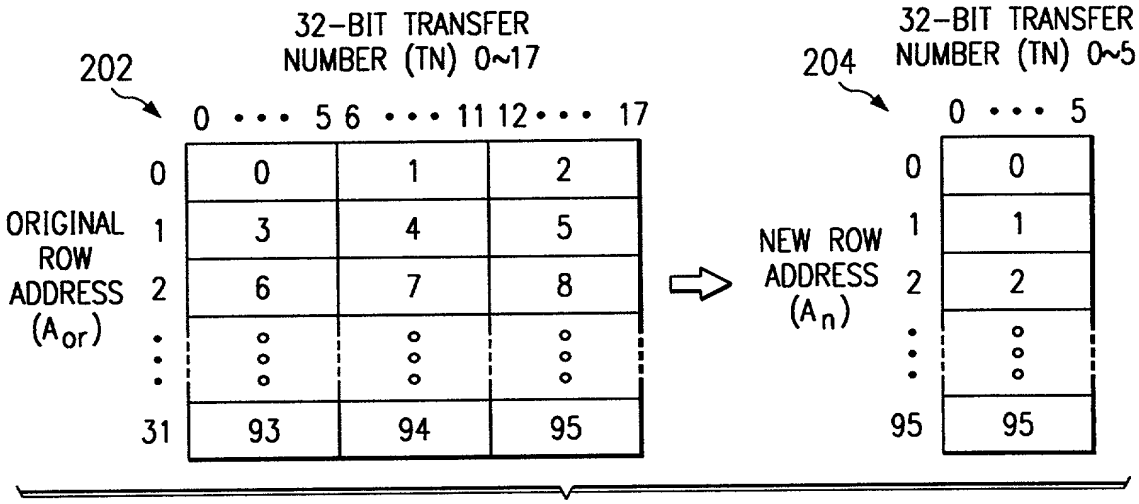

FIG. 2B

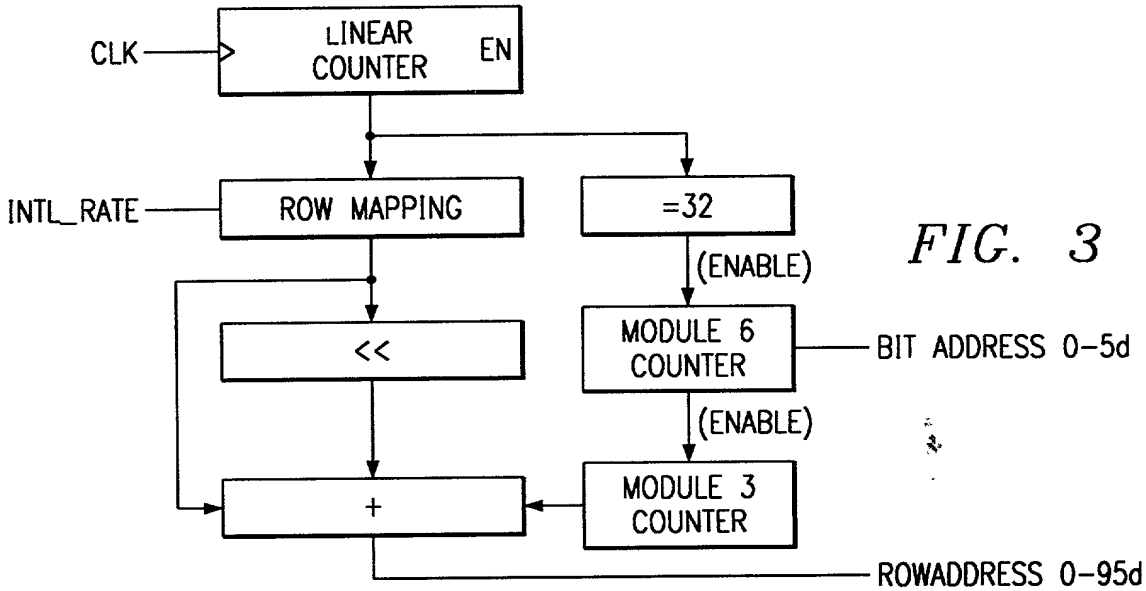

FIG. 3

20020709 "0702E2"

FIG. 2A

GENERIC READ ORDER ($A_4A_3A_2A_0A_1$)	DATA INPUT ORDER ($A_4A_3A_2A_1A_0$)	NEW WRITE ADDRESS–INVERTED GENERIC READ ORDER ($A_4A_3A_2A_0A_1$)
0	0	0
2	1	2
1	2	1
3	3	3
4	4	4
6	5	6
5	6	5
7	7	7
⋮	⋮	⋮
31	31	31

4800 OR 7200 bps

GENERIC READ ORDER ($A_4A_3A_0A_2A_1$)	DATA INPUT ORDER ($A_4A_3A_2A_1A_0$)	NEW WRITE ADDRESS–INVERTED GENERIC READ ORDER ($A_4A_3A_1A_0A_2$)
0 →	0 →	0
4	1 →	2
1 →	2 →	4
5	3	6
2 →	4	1
6	5	3
3	6	5
7	7	7
⋮	⋮	⋮
31	31	31

2400 OR 3600 bps

GENERIC READ ORDER ($A_4A_0A_3A_2A_1$)	DATA INPUT ORDER ($A_4A_3A_2A_1A_0$)	NEW WRITE ADDRESS–INVERTED GENERIC READ ORDER ($A_4A_2A_1A_0A_3$)
0	0	0
8	1	2
1	2	4
9	3	6
2	4	8
10	5	10
3	6	12
11	7	14
⋮	⋮	⋮
31	31	31

1800 OR 1200 bps

11-32201

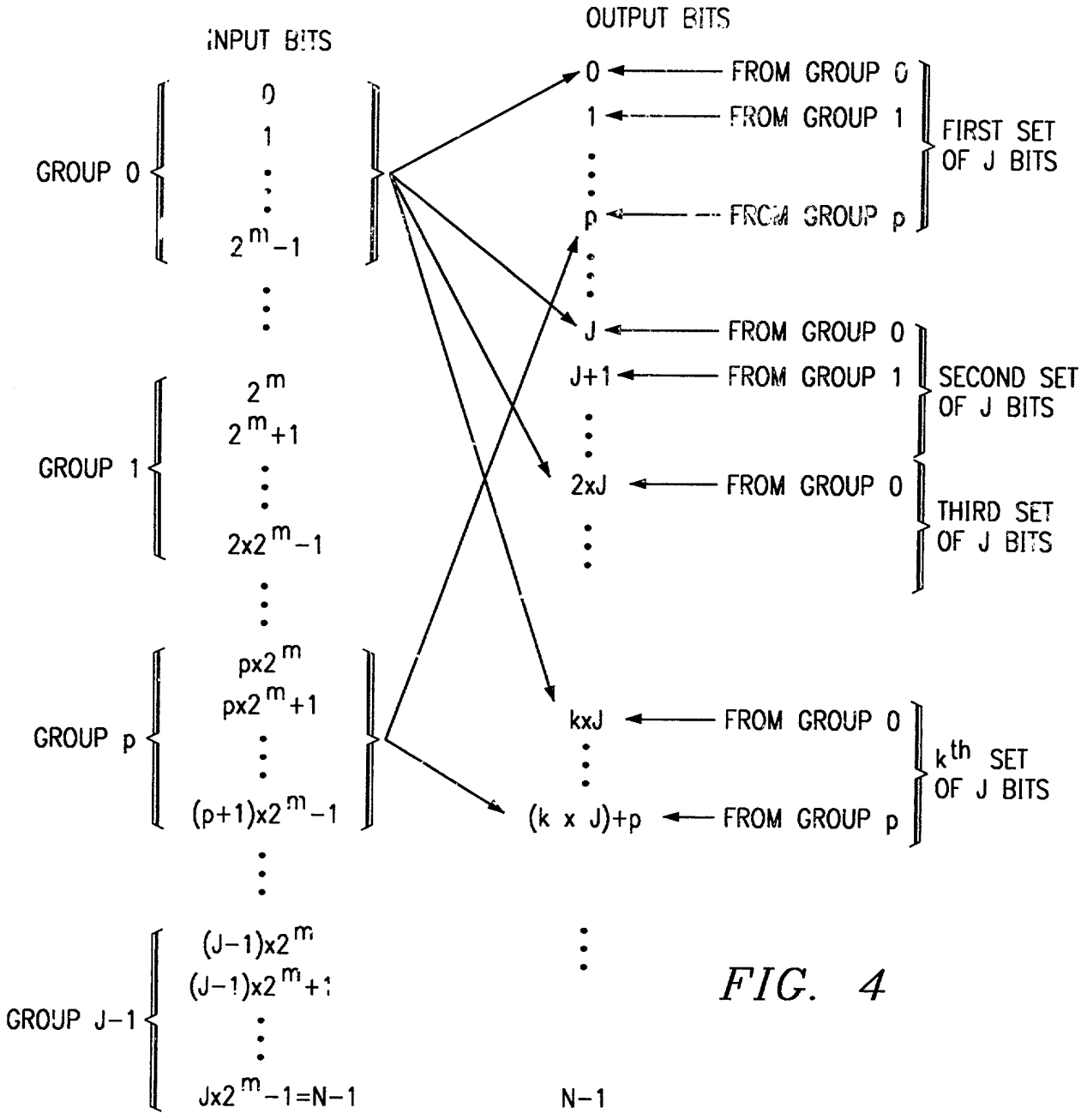
INPUT BITS
OUTPUT BITS
GROUP 0
0
1
2^m-1
GROUP 1
2^m
2^m+1
2x2^m-1
GROUP p
px2^m
px2^m+1
(p+1)x2^m-1
GROUP J-1
(J-1)x2^m
(J-1)x2^m+1
Jx2^m-1=N-1
0 ← FROM GROUP 0
1 ← FROM GROUP 1
p ← FROM GROUP p
FIRST SET OF J BITS
J ← FROM GROUP 0
J+1 ← FROM GROUP 1
SECOND SET OF J BITS
2xJ ← FROM GROUP 0
THIRD SET OF J BITS
kxJ ← FROM GROUP 0
(k x J)+p ← FROM GROUP p
k^th SET OF J BITS
N-1

FIG. 4

FIG. 5

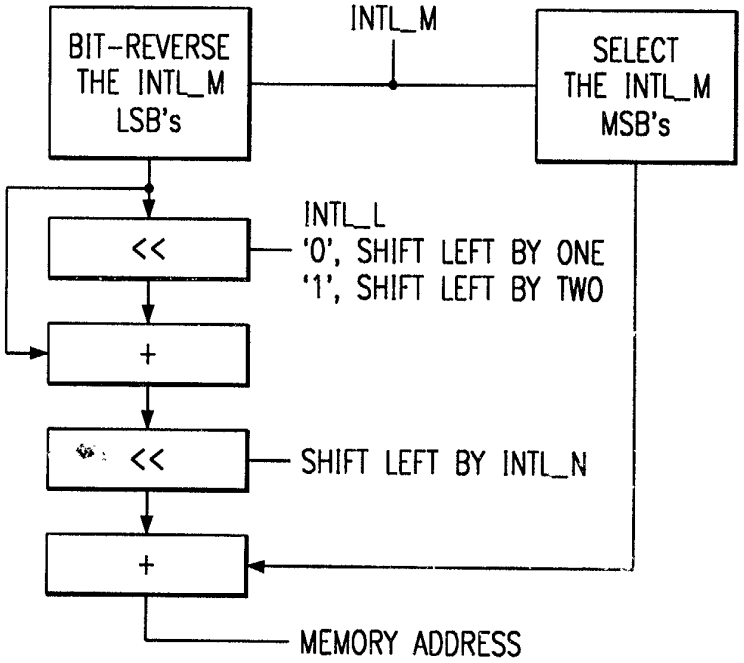

FIG. 6

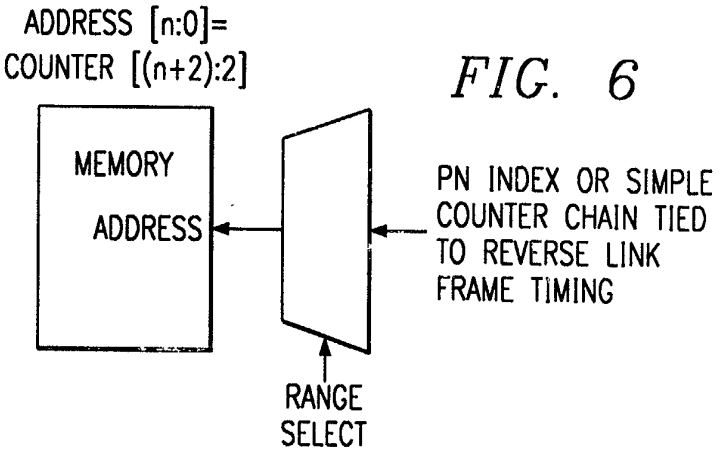
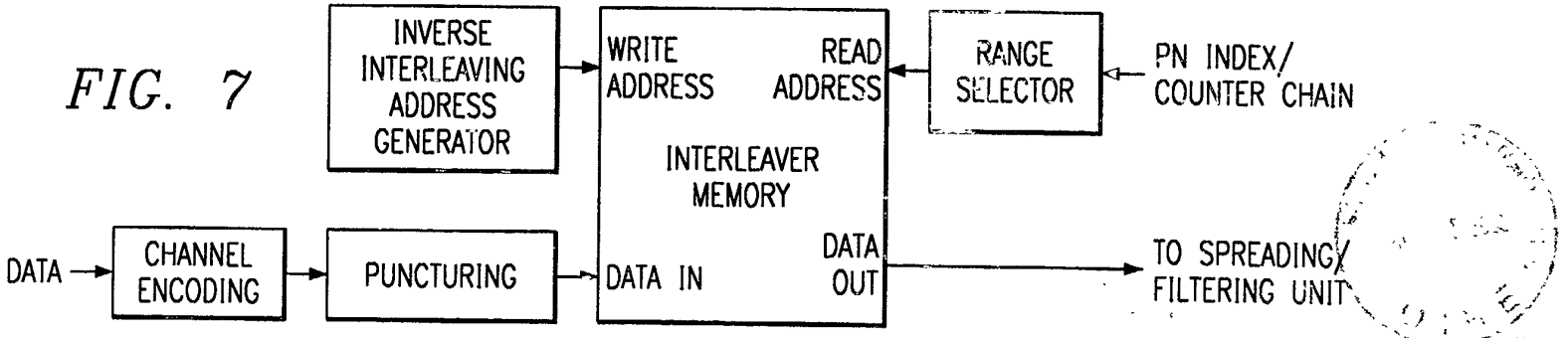
FIG. 7